Table 1

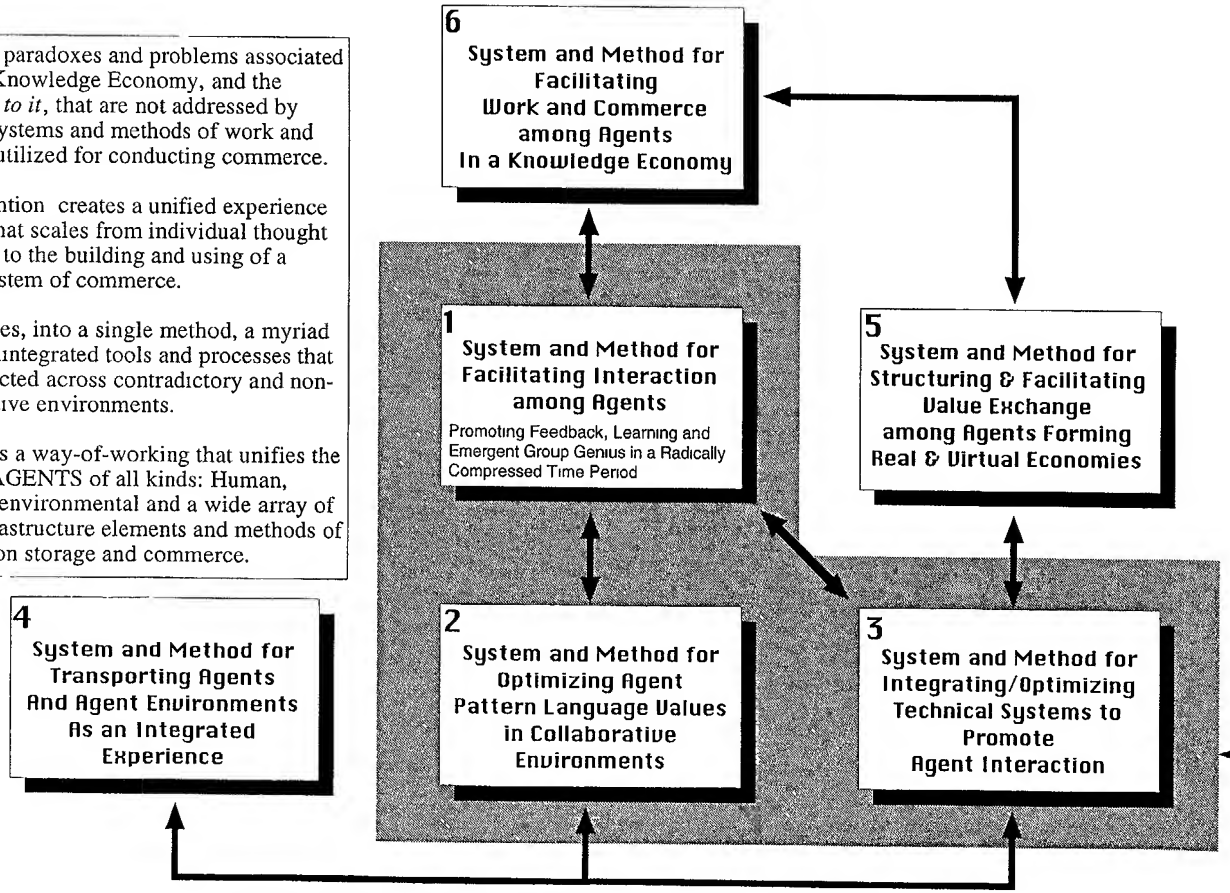
System and Method for Augmenting Knowledge Commerce

There are paradoxes and problems associated with the Knowledge Economy, and the *transition to it*, that are not addressed by existing systems and methods of work and the tools utilized for conducting commerce.

This invention creates a unified experience of work that scales from individual thought processes to the building and using of a Global system of commerce.

It integrates, into a single method, a myriad of now unintegrated tools and processes that are conducted across contradictory and non-collaborative environments.

It provides a way-of-working that unifies the value of AGENTS of all kinds: Human, machine, environmental and a wide array of tools, infrastructure elements and methods of information storage and commerce.



All six Sub-Systems of this Invention are linked, connected and integrated in a myriad of ways at many levels of recursion - the Arrows shown are the *STRONG* connections on the "top" level of the SYSTEM.

1 - AGENT INTERACTION

Dissolves many problems of numerous agents (Humans, computers, books, data bases, environmental and infrastructure elements, multimedia objects, etc.) speaking in non-compatible voices while interacting to solve complex problems associated with the necessity to stay requisite with a quickly changing and transforming environment and economy.

2 - AGENT ENVIRONMENTS

Dissolves many problems of Human (and other Agents) Architectural Pattern Language Values while accomplishing flexibility of arrangement (from workstation component level to building scale), the variety of individual and work spaces necessary for the full range of knowledge-intensive work (including collaboration of different size groups), the integration of multimedia and communication tools, yet, accomplishing a greater utilization of space and utilities than existing systems.

3 - AGENT SYSTEMS

Dissolves many problems of knowledge-augmentation by technical systems and tools for single Agent work and the collaborative interaction of Agents, both real time and asynchronously, through multi-channel and multimedia networks and tool sets.

4 - AGENT TRANSPORTATION

Dissolves many problems of seamless and integrated Agent (and agent environments) transportation providing a continuity of work and experience required by the demands of a global economy.

5 - AGENT ECONOMY

Dissolves many issues of facilitating knowledge-economy Transactions and Agent value accounting while radically reducing the multiplicity of financial instruments (in a myriad of legal environments) now systemic to the industrial-based economy.

6 - AGENT WORK AND COMMERCE

Dissolves many problems of Agent participation in a Complex Global Economy and the *TRANSITION* to it.

All of these Sub-Systems INTEGRATE into a single system and method-of-work that facilitates a seamless, continuity of effort and high-performance results across what are now partially connected systems, (at different and, often, non-communicating levels of recursion), now delivering a fragmented, expensive and lengthy experience that is not requisite with the existing (let alone future) complexity nor rate-of-change in the global economic environment.

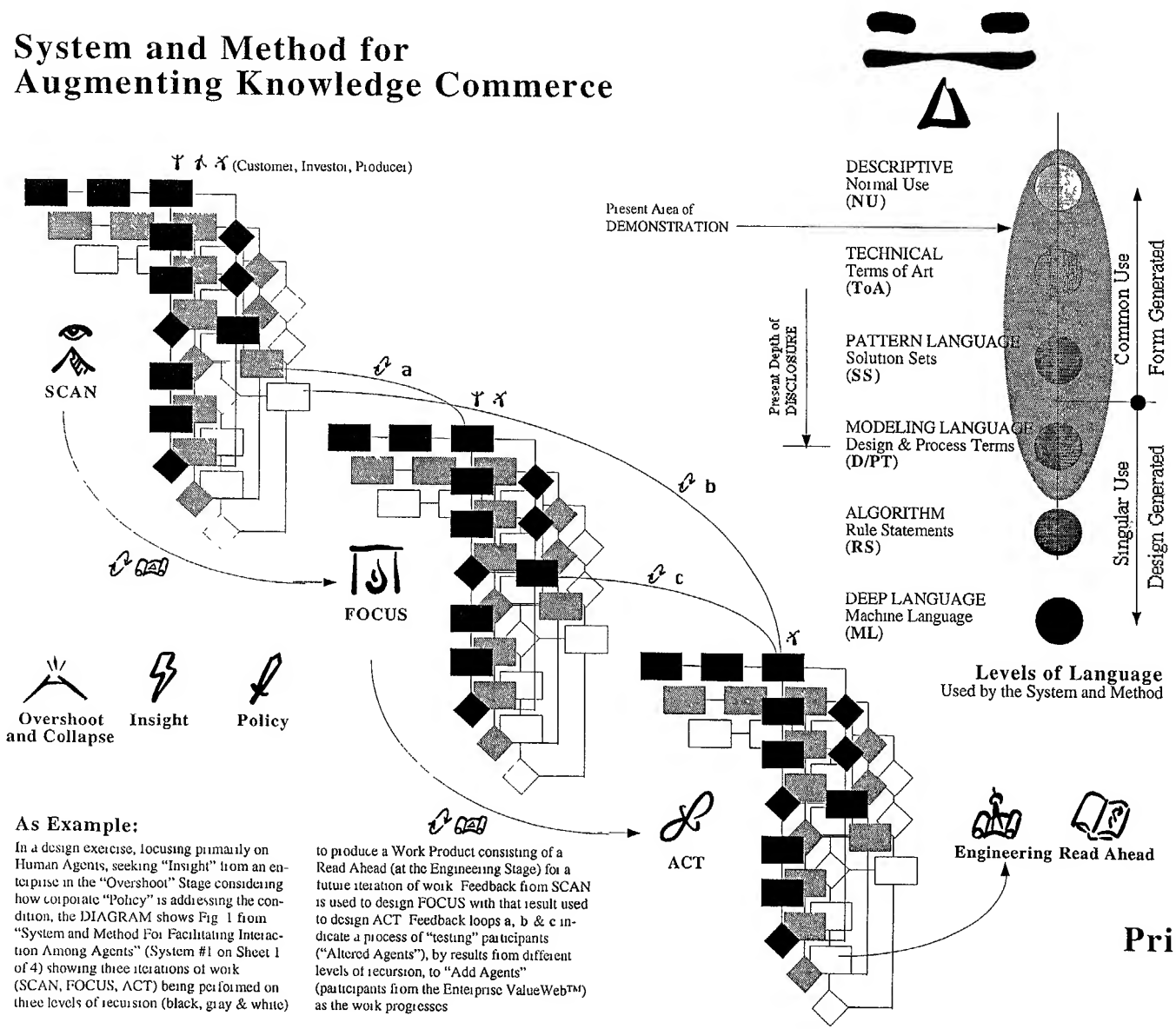
Area of Present demonstration integrating
TOOLS • ENVIRONMENTS • PROCESSES
to facilitate emergent group genius among Human Agents
in radically compressed time periods utilizing agents of all kinds

This work is *expressed* in a variety of products and services in the market place such as DesignShop™ experiences, various Work Shops, NavCti™ and various work environments PatchWorks Designs™ projects will require and implement the System on "Level One."

Relationship Among Patent Sub-Systems

Table 2

System and Method for Augmenting Knowledge Commerce



As Example:

In a design exercise, focusing primarily on Human Agents, seeking "Insight" from an enterprise in the "Overshoot" Stage considering how corporate "Policy" is addressing the condition, the DIAGRAM shows Fig 1 from "System and Method For Facilitating Interaction Among Agents" (System #1 on Sheet 1 of 4) showing three iterations of work (SCAN, FOCUS, ACT) being performed on three levels of recursion (black, gray & white) to produce a Work Product consisting of a Read Ahead (at the Engineering Stage) for a future iteration of work. Feedback from SCAN is used to design FOCUS with that result used to design ACT. Feedback loops a, b & c indicate a process of "testing" participants ("Altered Agents"), by results from different levels of recursion, to "Add Agents" (participants from the Enterprise ValueWeb™) as the work progresses

Rule of Recursion

All elements that define viability, on one level of recursion, of a system must occur on all levels of recursion of the system.

For a *complex* agent to be viable or for a simple agent to be effective in a complex environment, (of agents) the Agent must be "acted upon" (and/or be acting) at a minimum of three Levels of Recursion ("above," at the level of the Agent and a level "below" the Agent).

Actions that on a single Level of Recursion that are additive, on multiple Levels of Recursion will usually be multipliers. *leverage* is accomplished by employing more than one Level of Recursion (thus, dealing with the Requisite Variety Rule: Variety must equal Variety). Generally, greater complexity can be dealt with or accomplished by employing Recursion than by action on one level of a system (given the same number of actions and level of resources).

Emergence happens "between" (out of) Levels of Recursion.

Rule of Iteration

All things being equal, a single iteration of work, in isolation, is additive between steps while multiple iterations of work (in a continuous process) multiplies results.

Work iterations must happen in rapid succession and within time compression for maximum effect.

Rule of Feedback

Feedback is the message from a sensor of the system to the controller of the system of the difference between performance and expectation. Positive feedback amplifies; negative feedback attenuates.

Feedback on feedback and/or feedback between Levels of Recursion is feedback of a *complex* kind and is required for the governance (self correction) of complex and emergent systems.

Rule of Iterative, Feedback Driven Systems acting on Multiple Levels of Recursion

These systems exhibit *increasing returns* and learning. They co-evolve (with their environment) emergent behavior. They are open-ended and cannot be predicted or controlled.

These systems can be *operated* in a way so that the desired *kinds* of results are consistently accomplished. This is possible when the Rules of Iteration, Feedback and Recursion are employed in a System of specific architecture (as described) that employs sufficient critical mass. Emergence is the result of complexity. Complexity is a factor of iteration, feedback, recursion, critical mass and the number of Agent (nodes) interactions in a specific time period and place.

Principles of Iteration and Feedback and The Rule of Recursion

Table 3

System and Method for Augmenting Knowledge Commerce

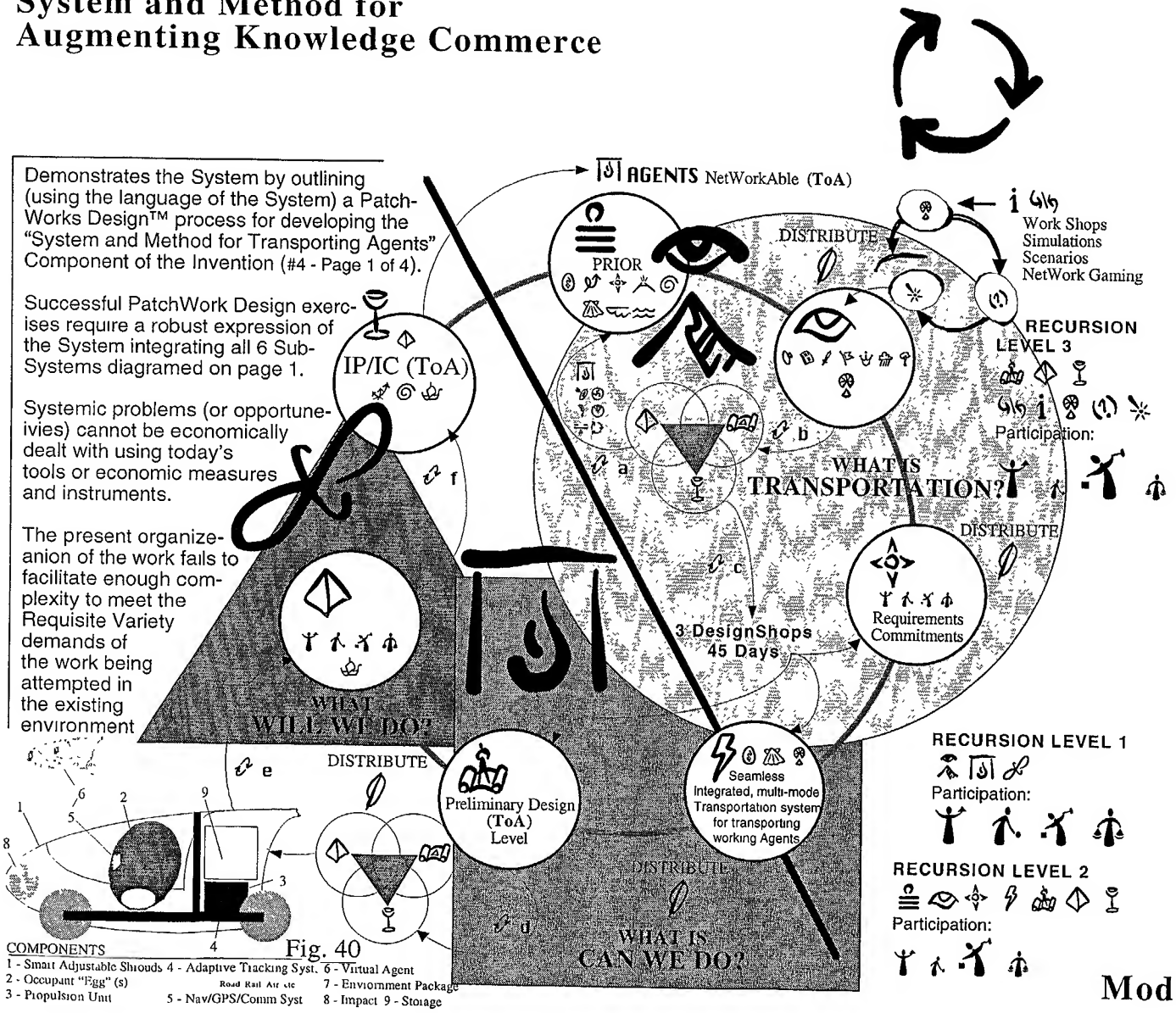


Fig. 40

: Employing a PatchWorks Design™ (**ToA**) for 130 organizations (10 Tier 1, 30 Tier 2 & 90 Tier 3), 8 organizations and 3 organizations with a project phase duration of 180 days and total financial resources equivalent to $15,000,000 U.S. to a prototype for purposes with the in mind to a consortium to a global .

: Select HumanAgents (**ToA**) and knowledgeObjetAgents (**ToA**) by , , (**RS**) filters (Fig. 1 Decider S3, S8). IP/ IC (**ToA**) to deploy VirtualAgents (**ToA**) to transact value in the NetWork (**ToA**).

: Remote Collaboration™, Remote Presence™, KnOwhere Store™ and PROCESS to and the NetWork (**ToA**) through synchronous and asynchronous multiple iterations (**ToA**) of activities (see: **e**) on simultaneous multiple levels of recursion (**ToA**) and to provide experiences for participating designers and general public via Work Shops and the Internet as (see: **b**). Exercise continuously.

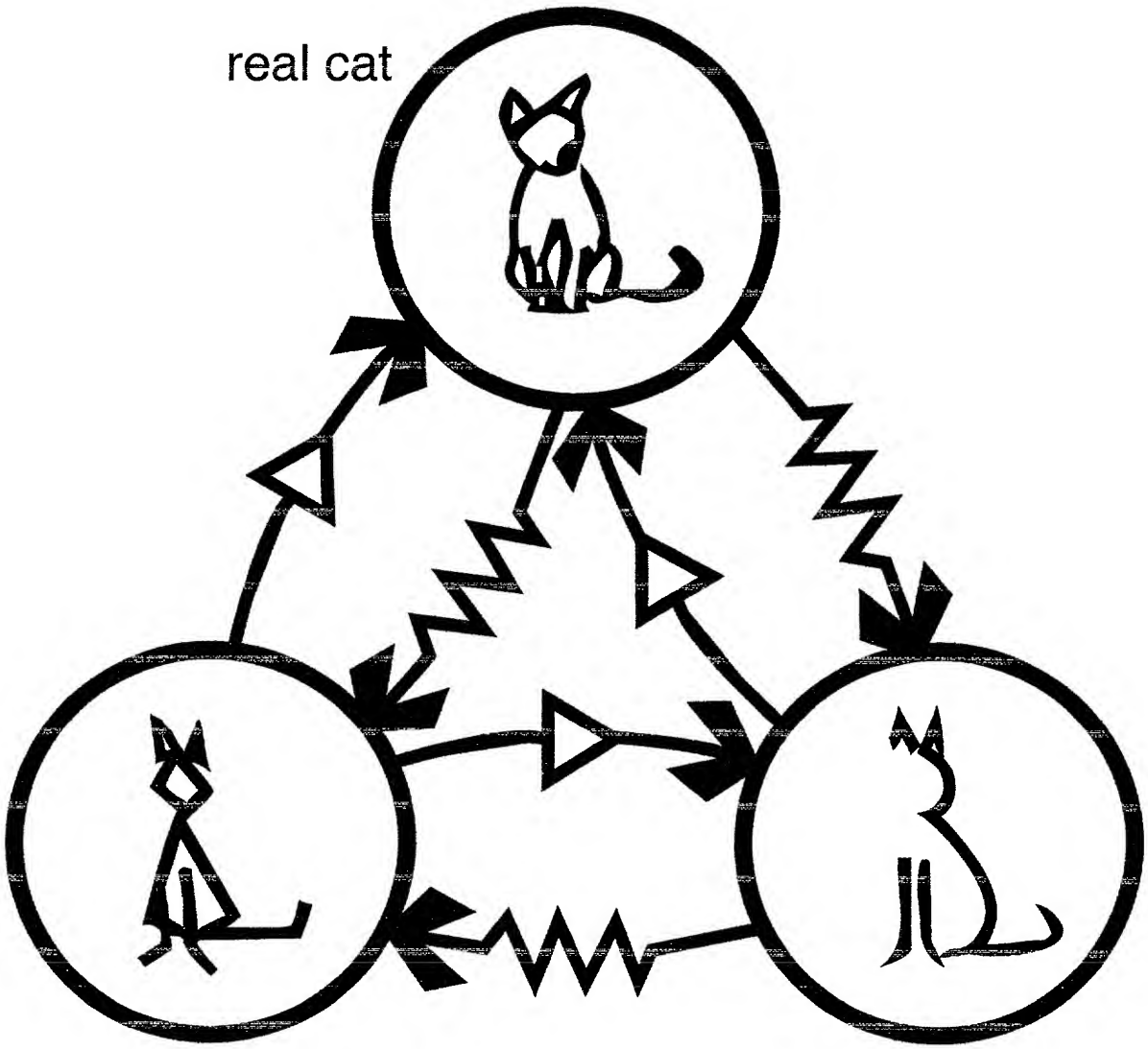
: Employ Pattern Language (**SS**) from "The Art of War" (Sun Tzu) to protect and position the project in the present political/social environment. Employ a variety of design and simulation Modules (**SS**) in an iterative (**ToA**) series of DesignShops™ and Work Shops (WSR™, CHOICE™, 7 Domains™) on three basic levels of Recursion (**ToA**).

: Build Virtual Agents as ValueTransactors (**ToA**) and instruments of execution. Exit the Agents (see **Fig. 1**) periodically for to the process and for transacting ValueExchanges (**ToA**) (see: **f**). Leverage IP/IC (**ToA**) on ongoing basis so as to generate IncreasingReturns (**ToA**) to self fund the . Create KnowledgeEconomy (**ToA**) among per methods of **Sub-System 4** (see sheet 1 of 4)

@ : Integrated Transportation System. Seamless continuity between modes (personal/public; land/air/water) accomplished by "decomposable" modular structure employing Egg Units of various sizes. Eggs dock to home, hotels offices. Eggs configure into cars, Bus, Airplanes and ship assemblages and fully employ AutoTracking (**ToA**).

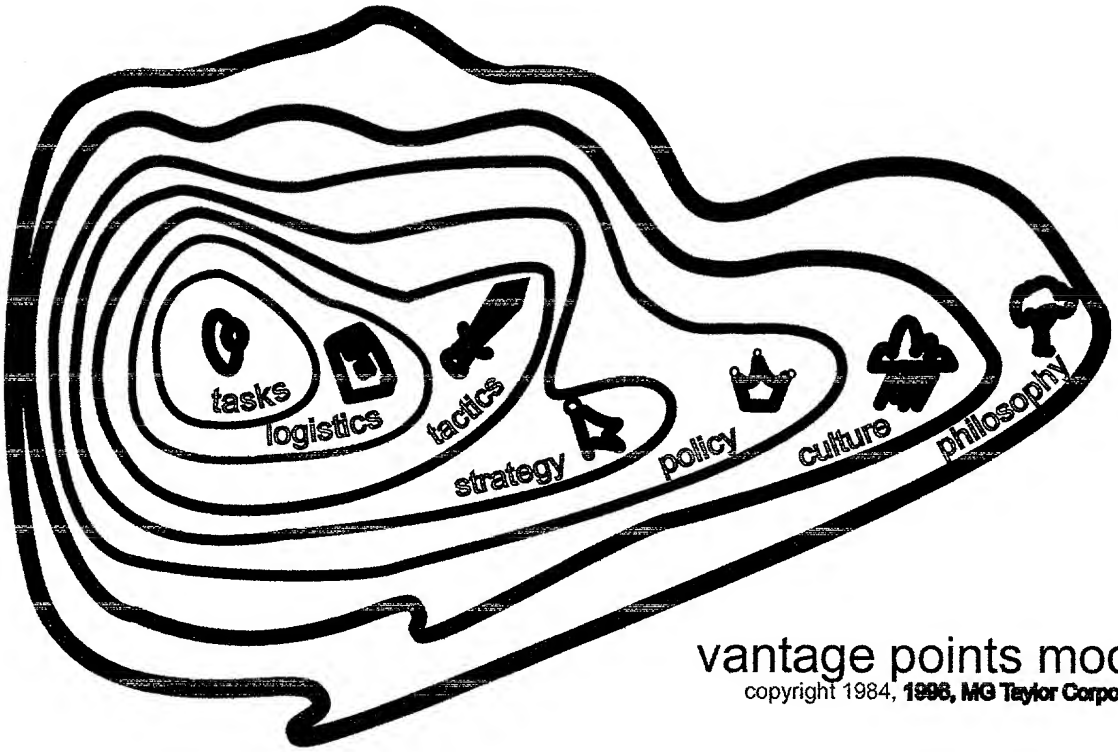
Transportation Components are VirtualAgents (**ToA**) in the NetWork (**ToA**) seamless communication and location/tracking, variable (RealTime - **ToA**) cost, risk accounting and AgreementExecution (**ToA**), and ValueExchanges/Accounting (**ToA**).

Partial Description
of Sub System 4 Elements
utilizing a sampling of
Modeling Language and Algorithms



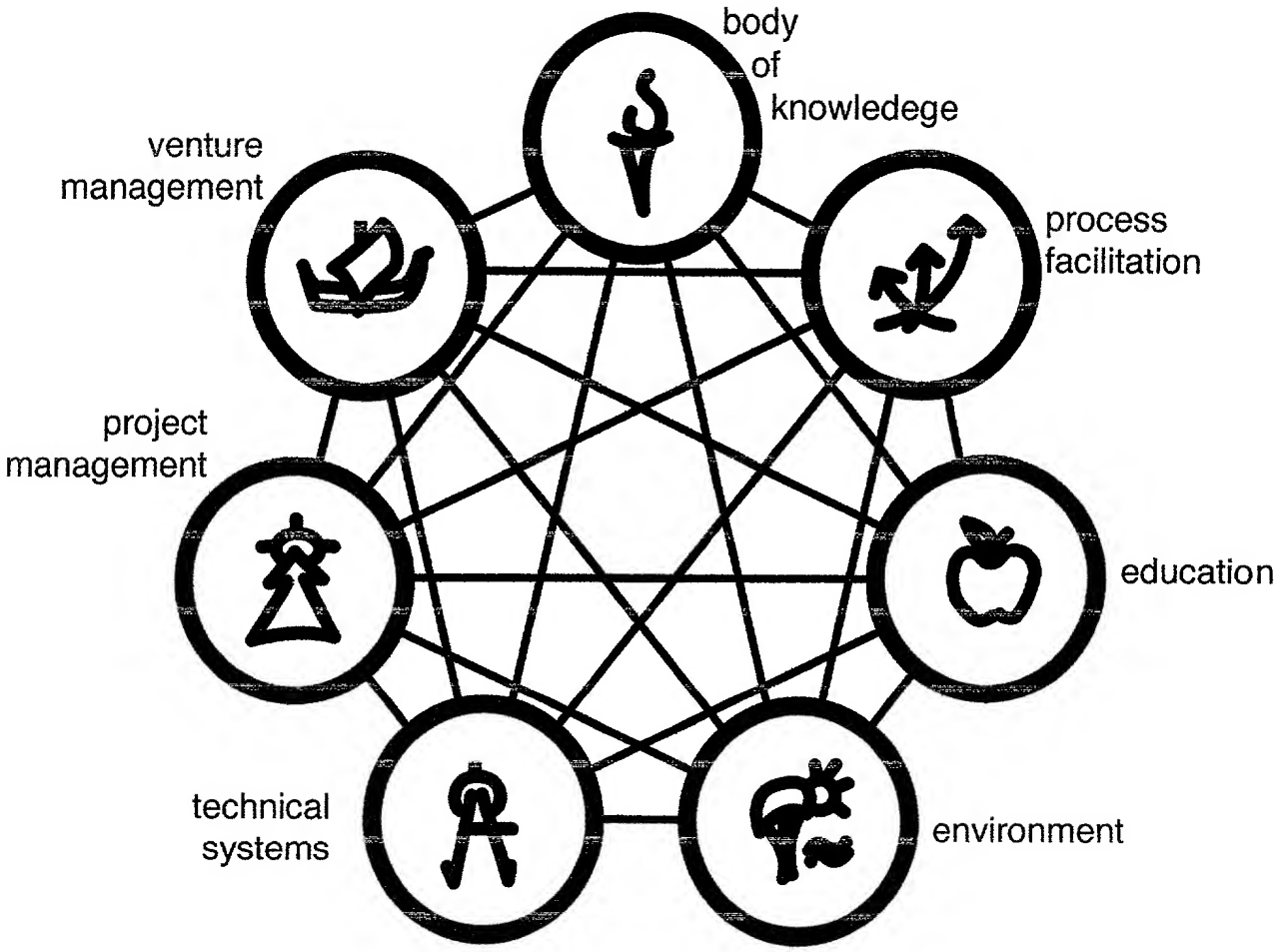
three cat

Table M1



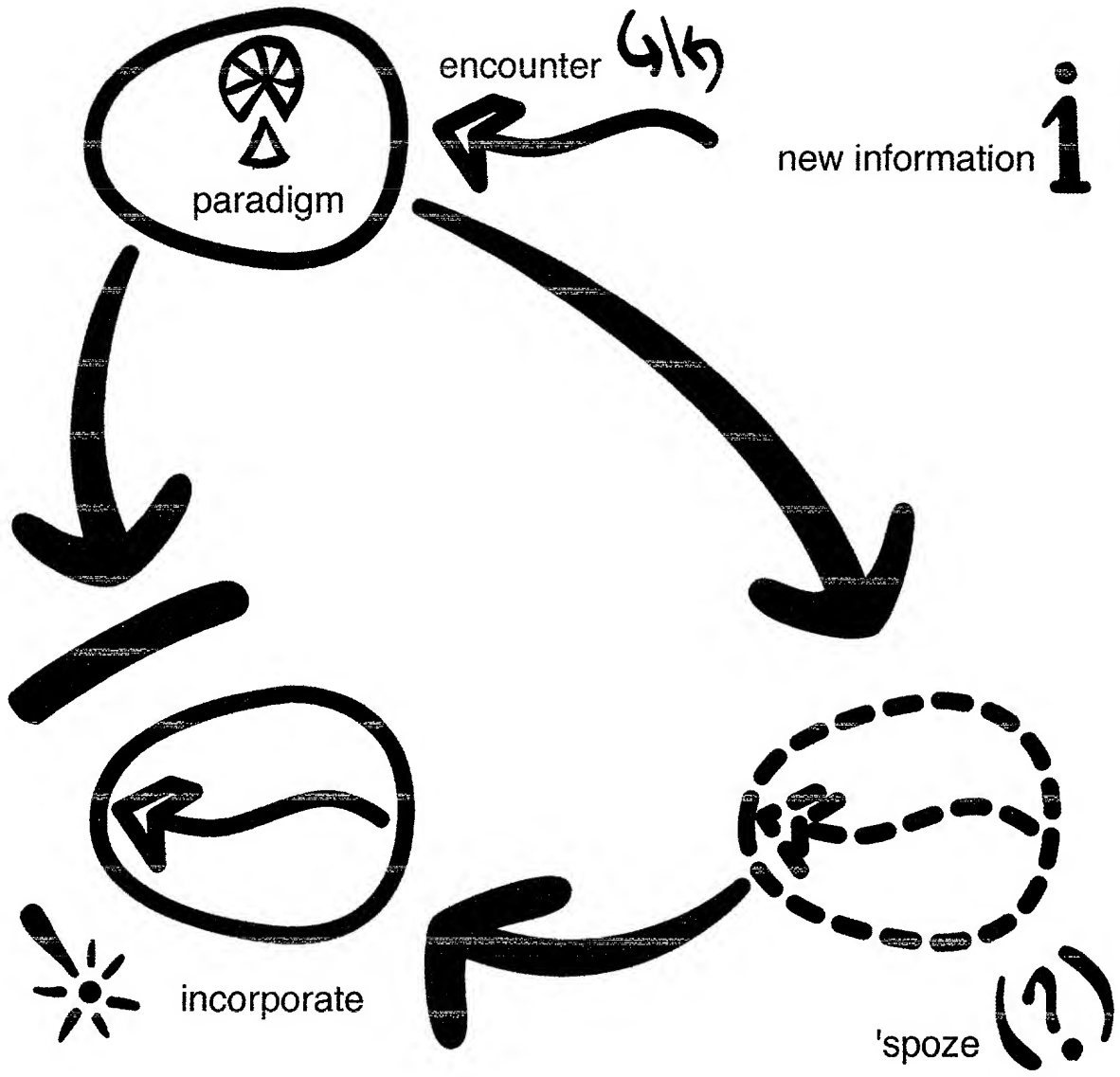
vantage points model

Table M2



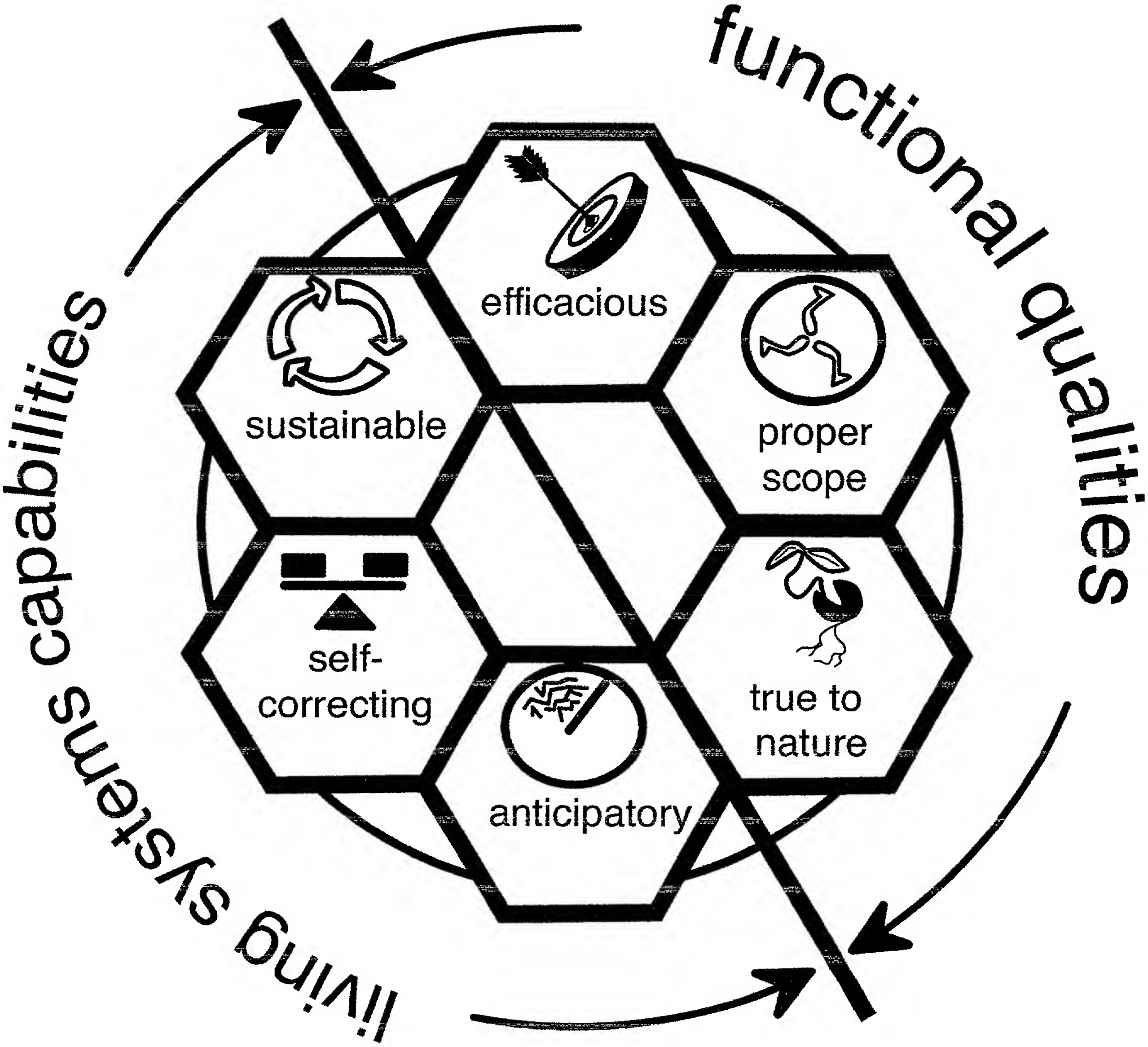
7 domains®

Table M3



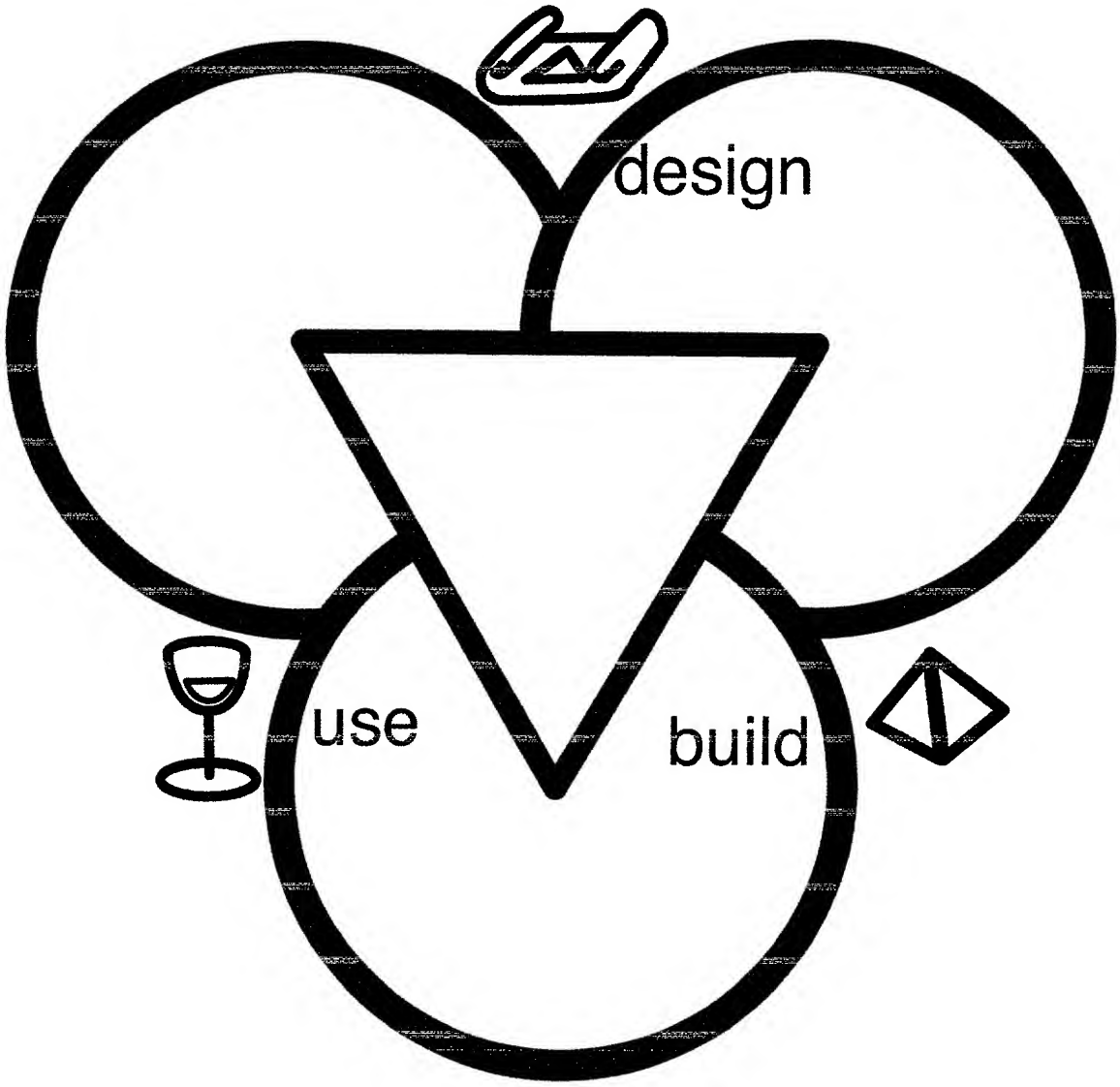
'spoze

Table M4



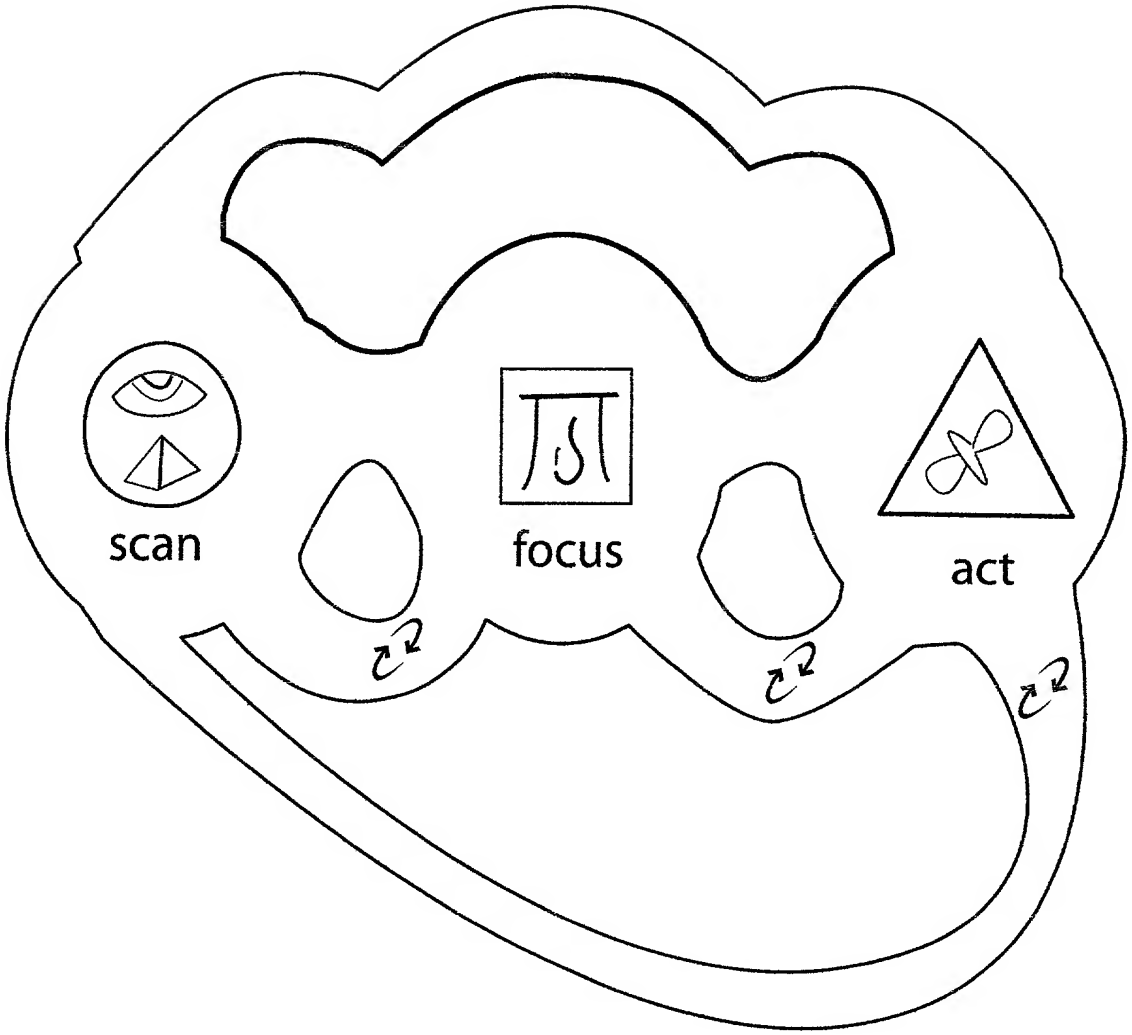
appropriate response model

Table M5



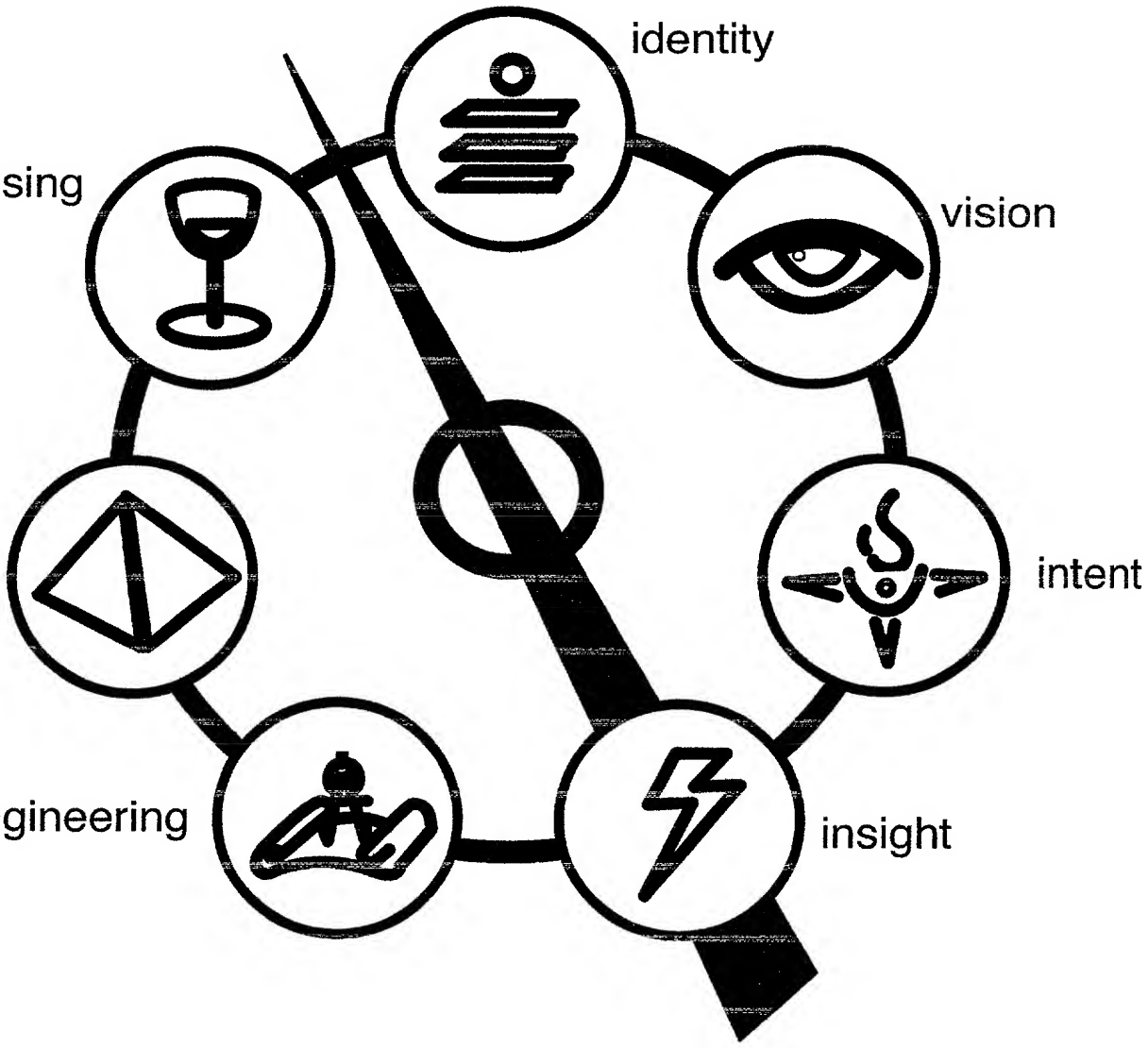
design build use

Table M6



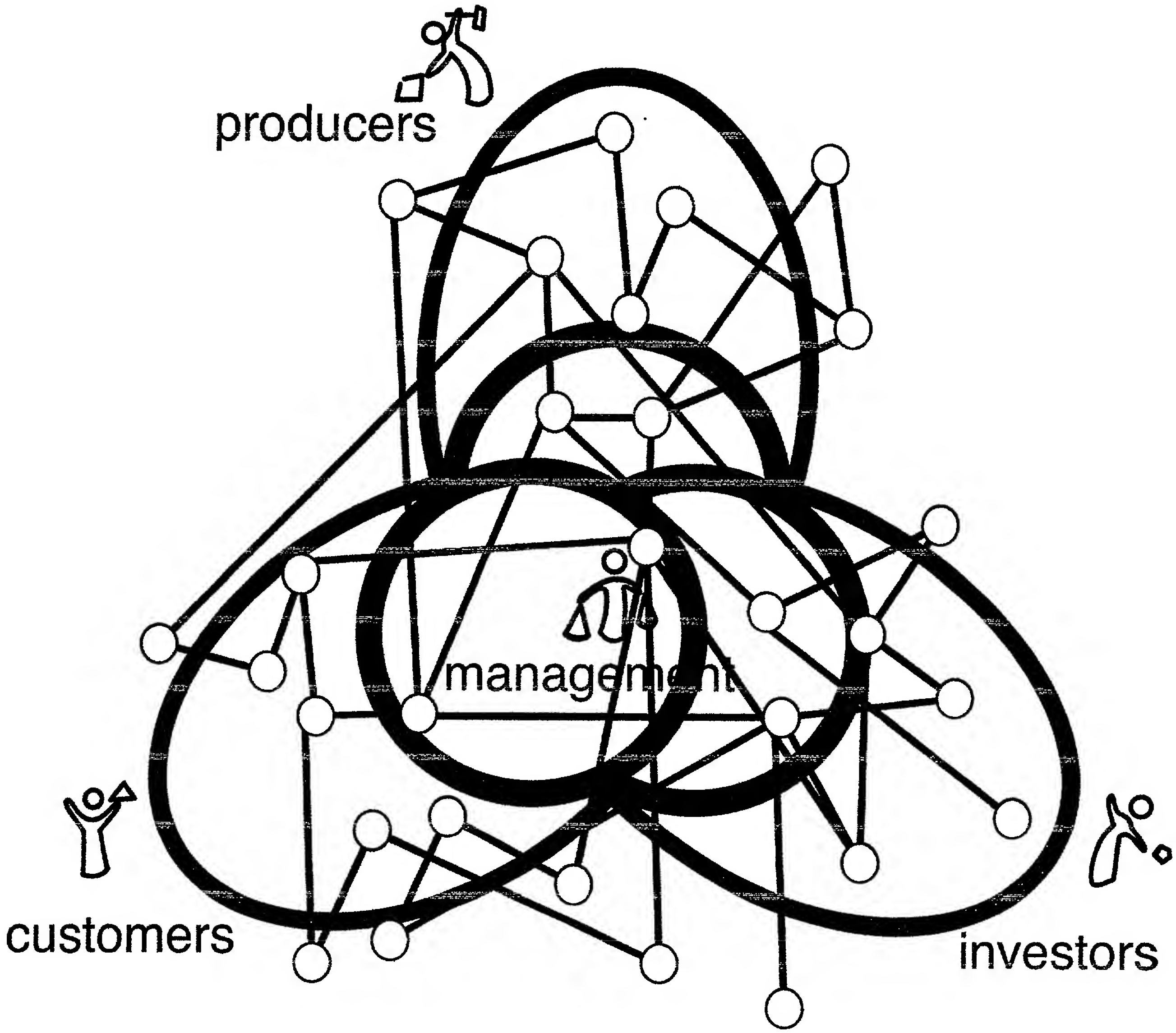
scan focus act

Table M7



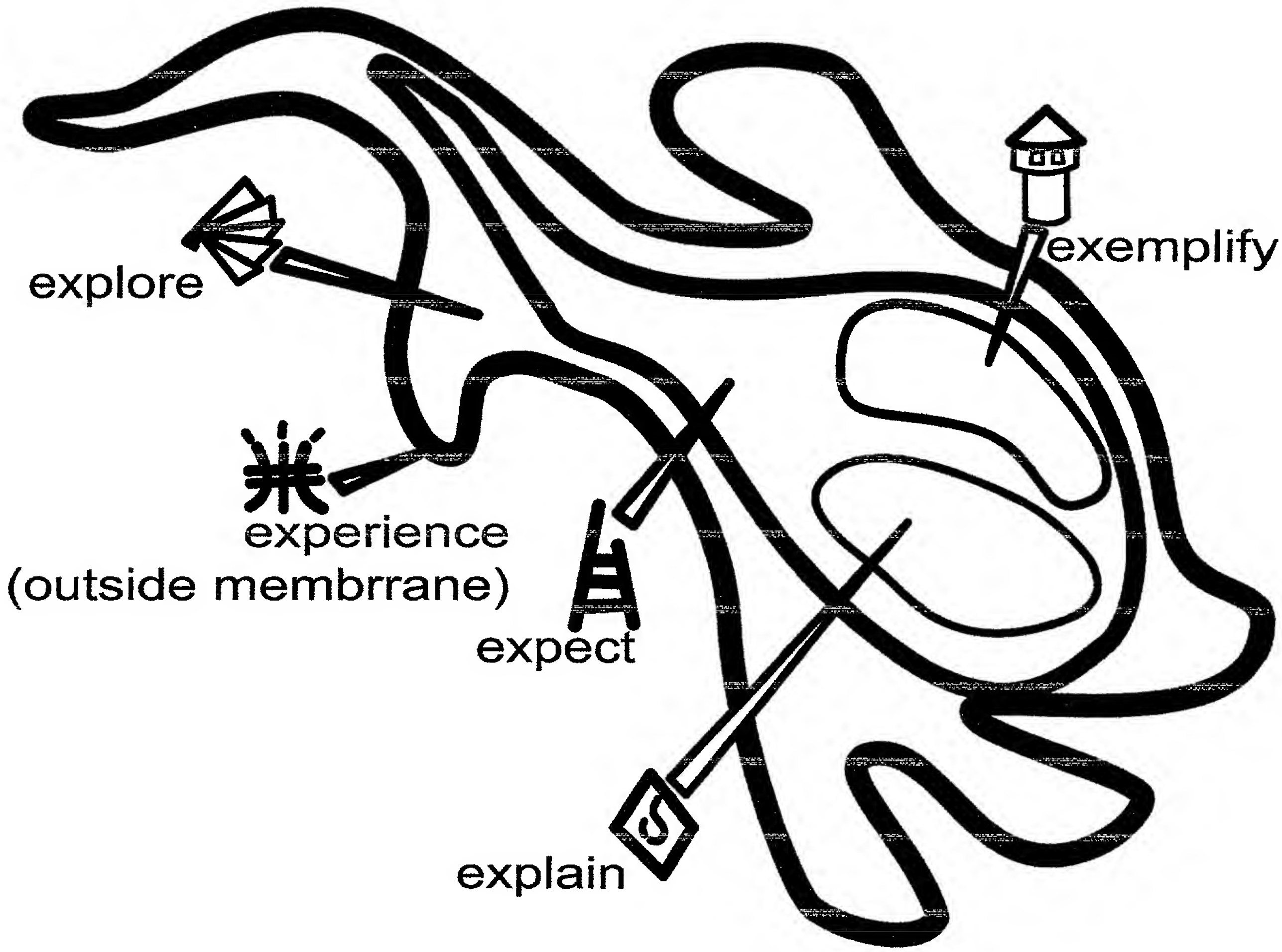
creative process model

Table M8



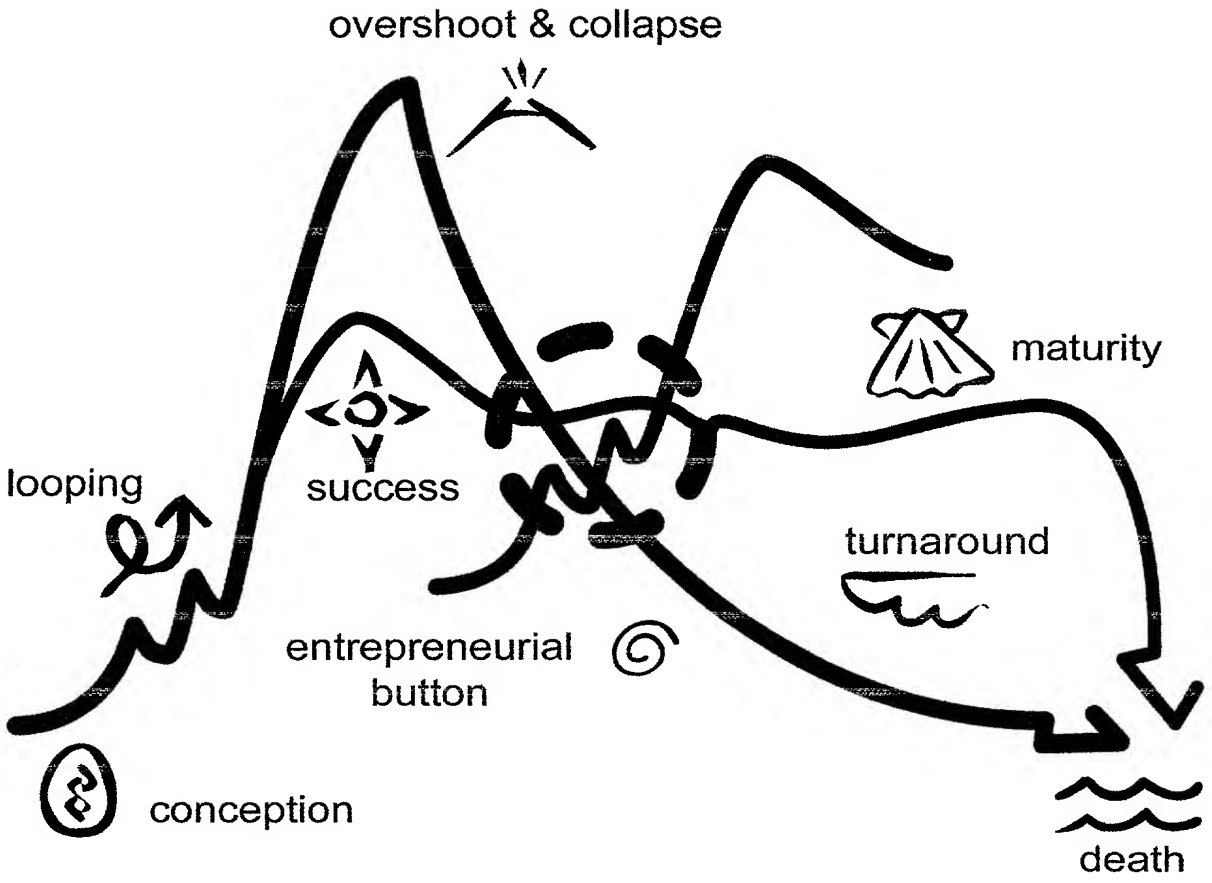
ValueWeb^Æ

Table M9



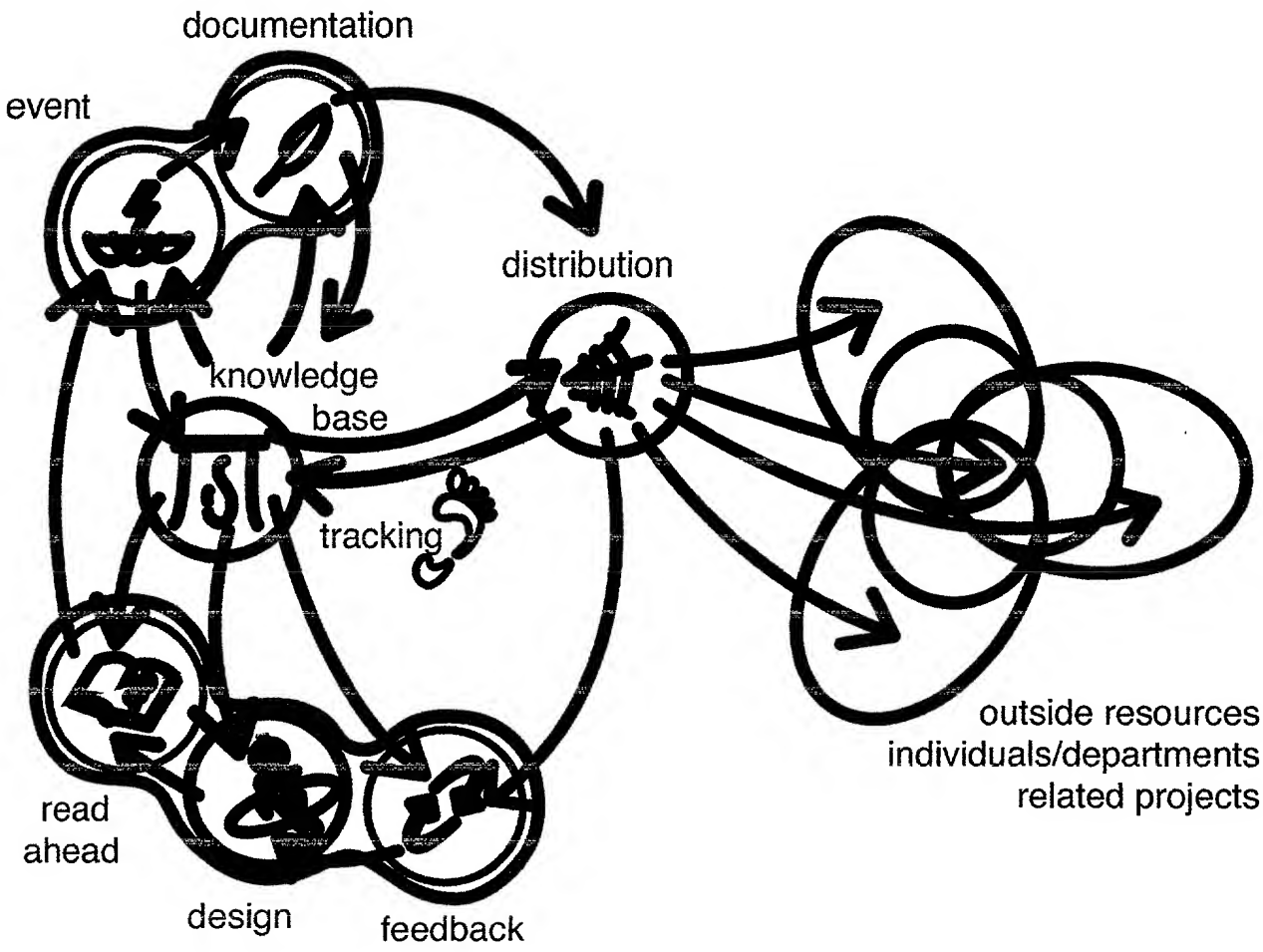
5 e's of education

Table M10



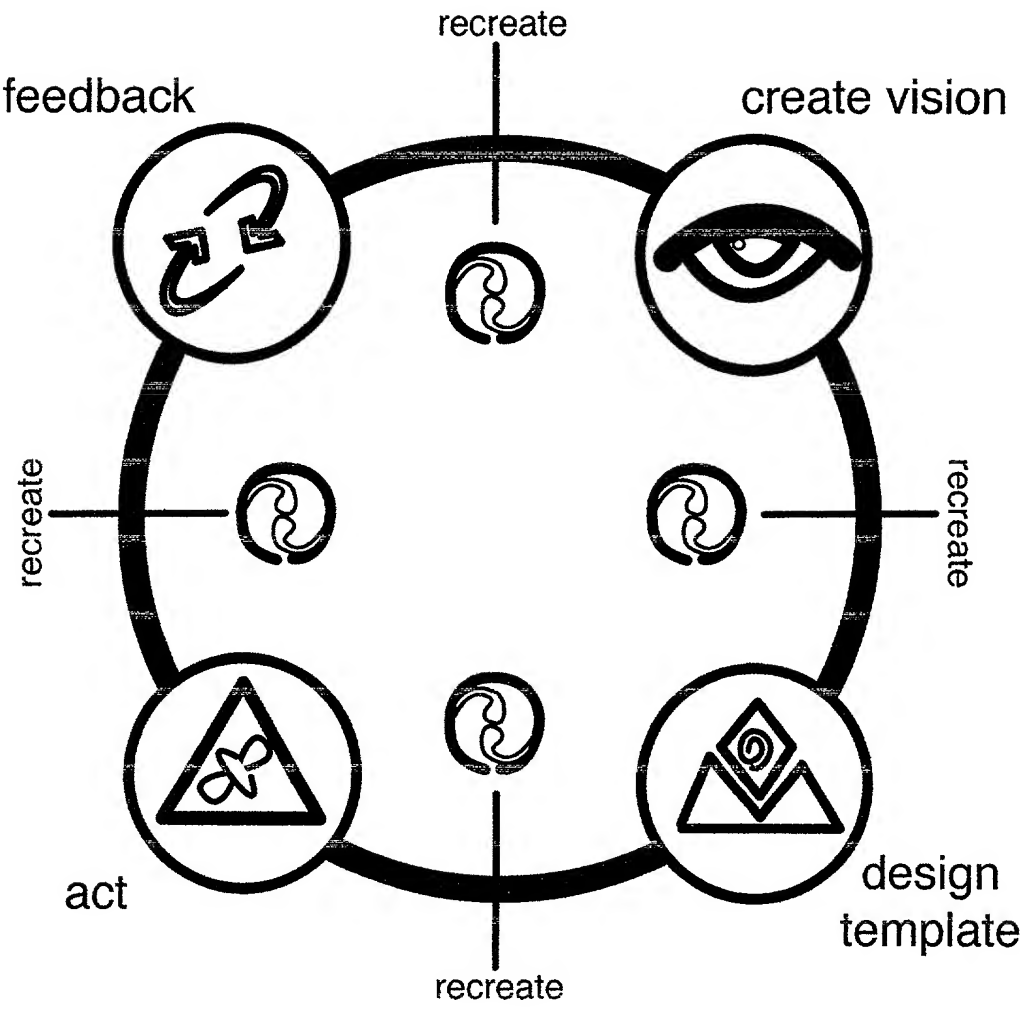
stages of an enterprise

Table M11



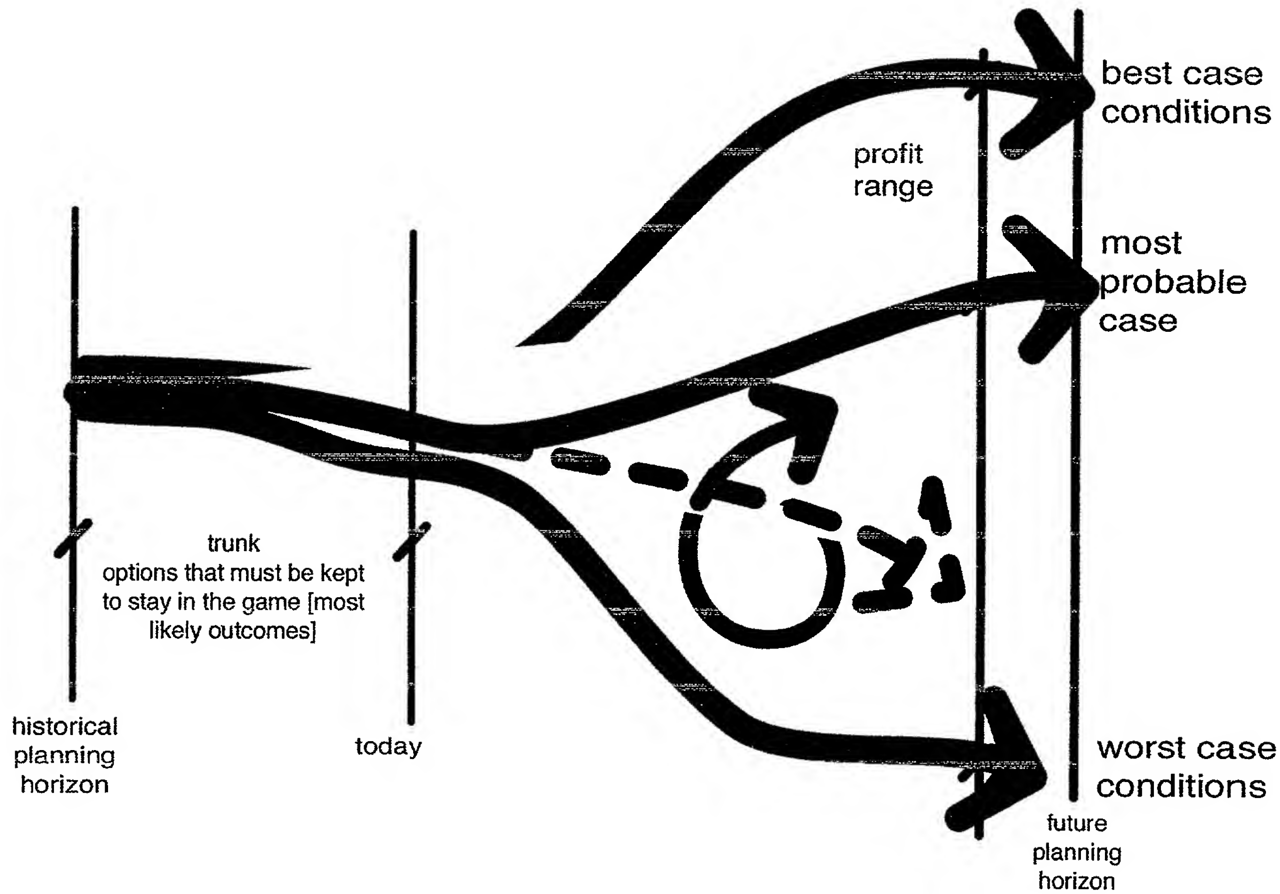
10 step knowledge management model[Æ]

Table M12



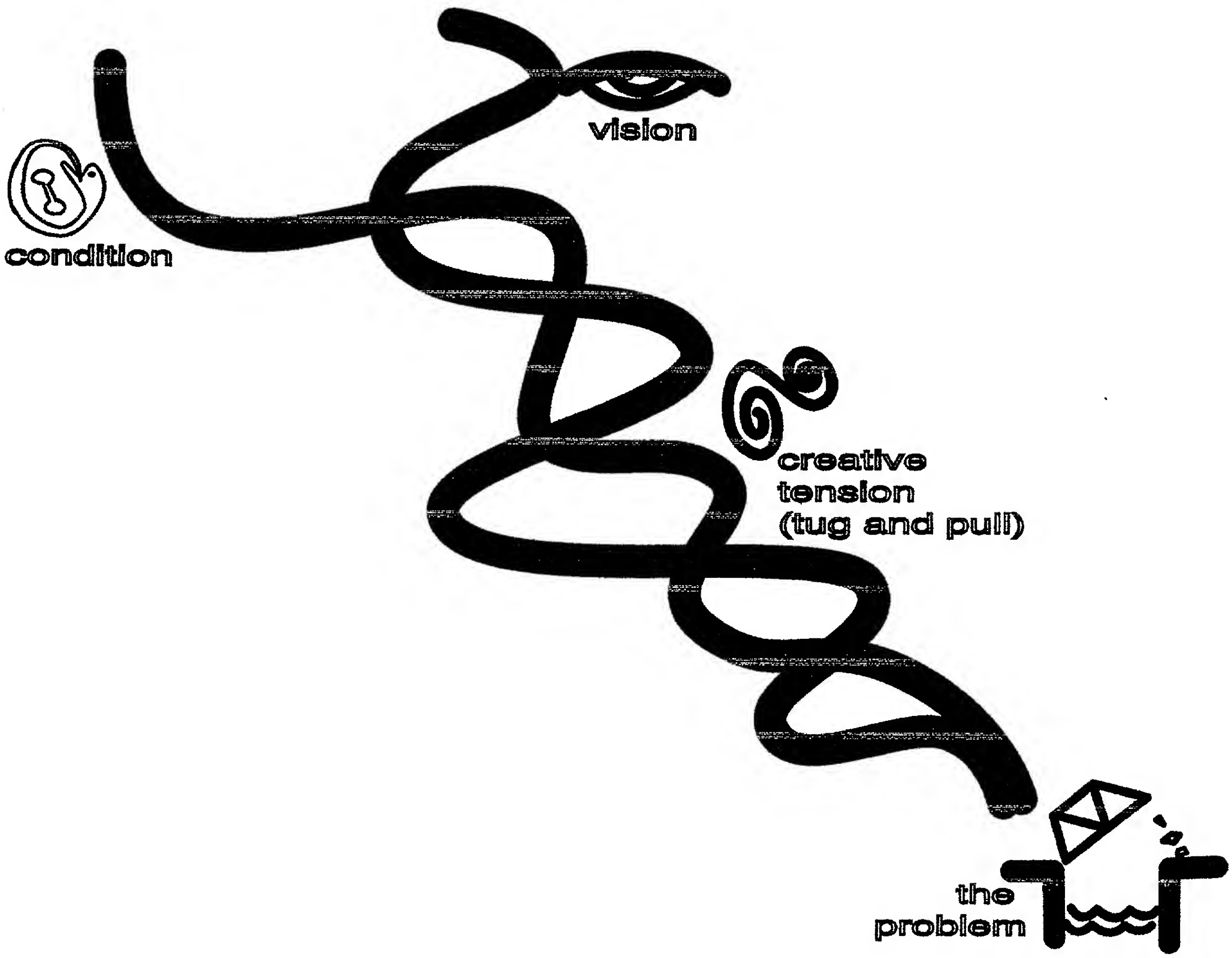
4 step recreative process

Table M13



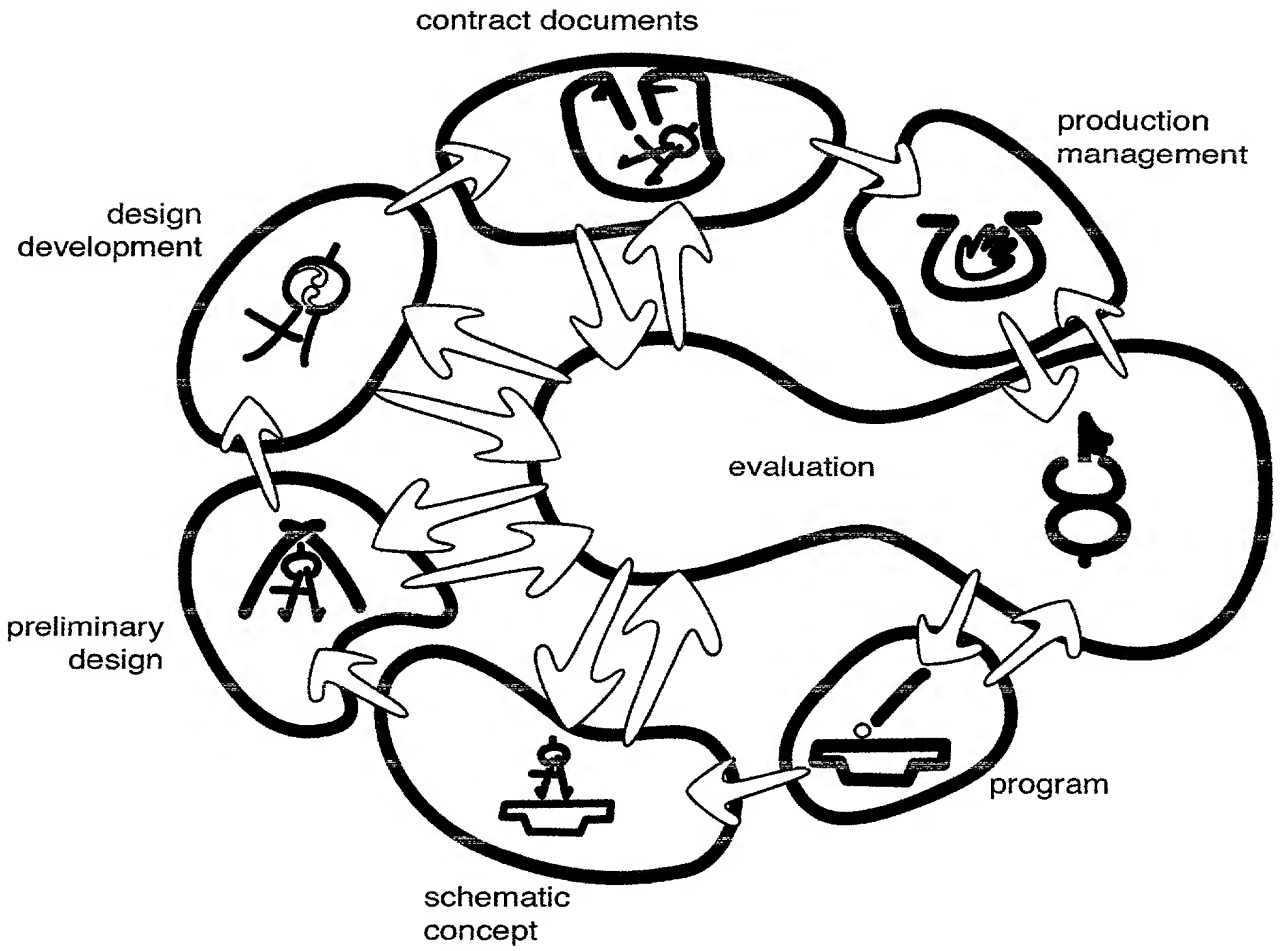
best case, worst case model

Table M14



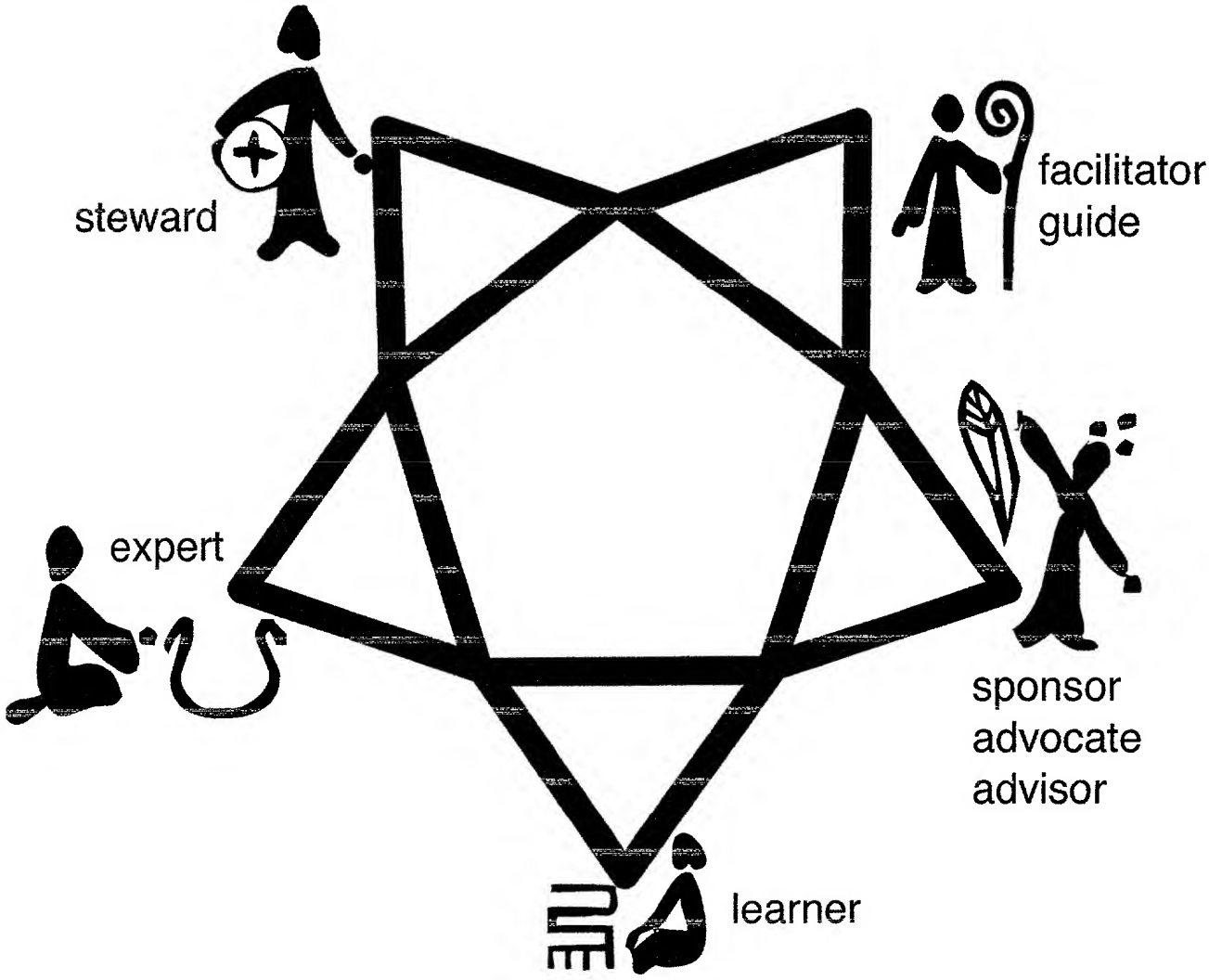
creating the problem model

Table M15



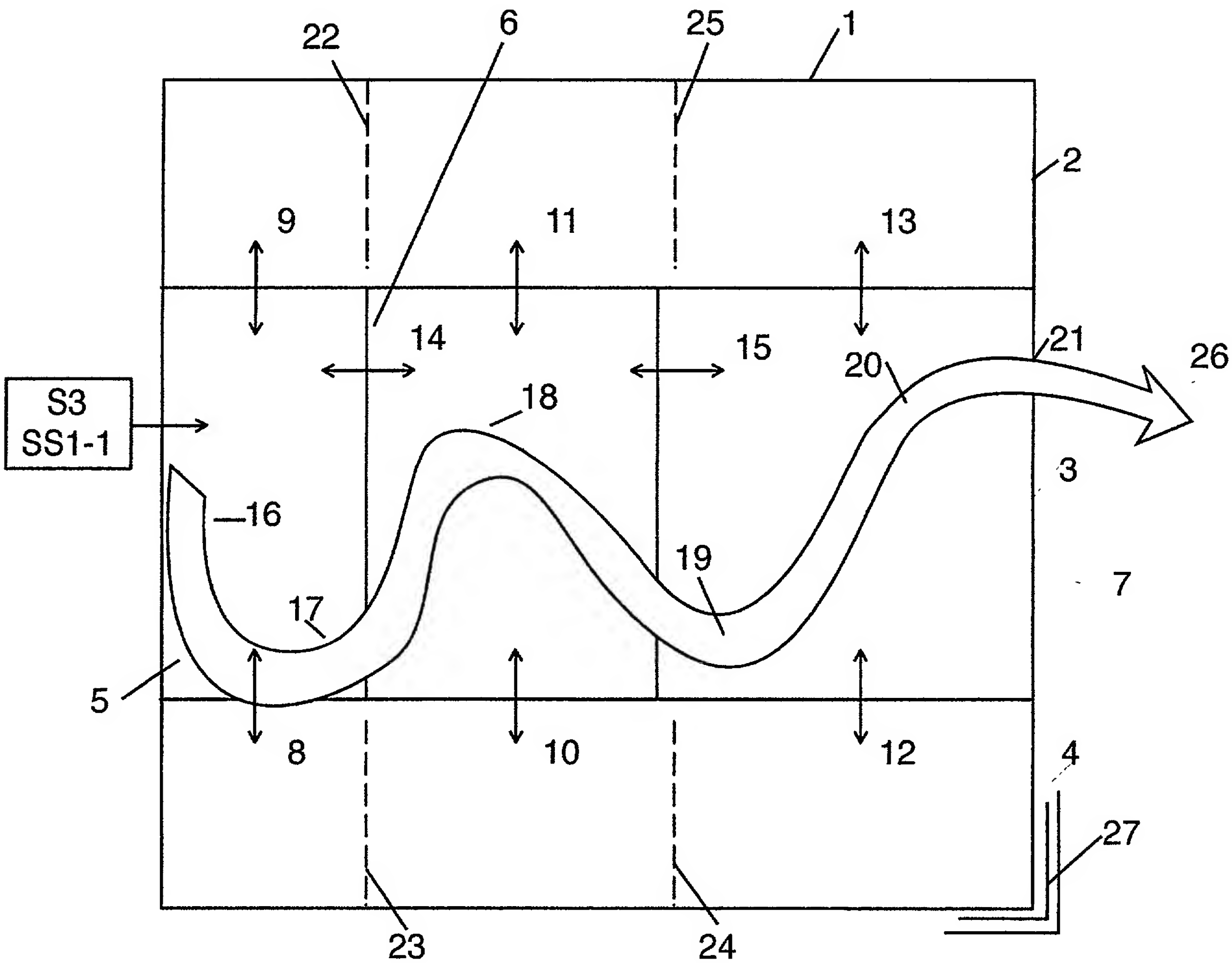
design formation© model

Table M16



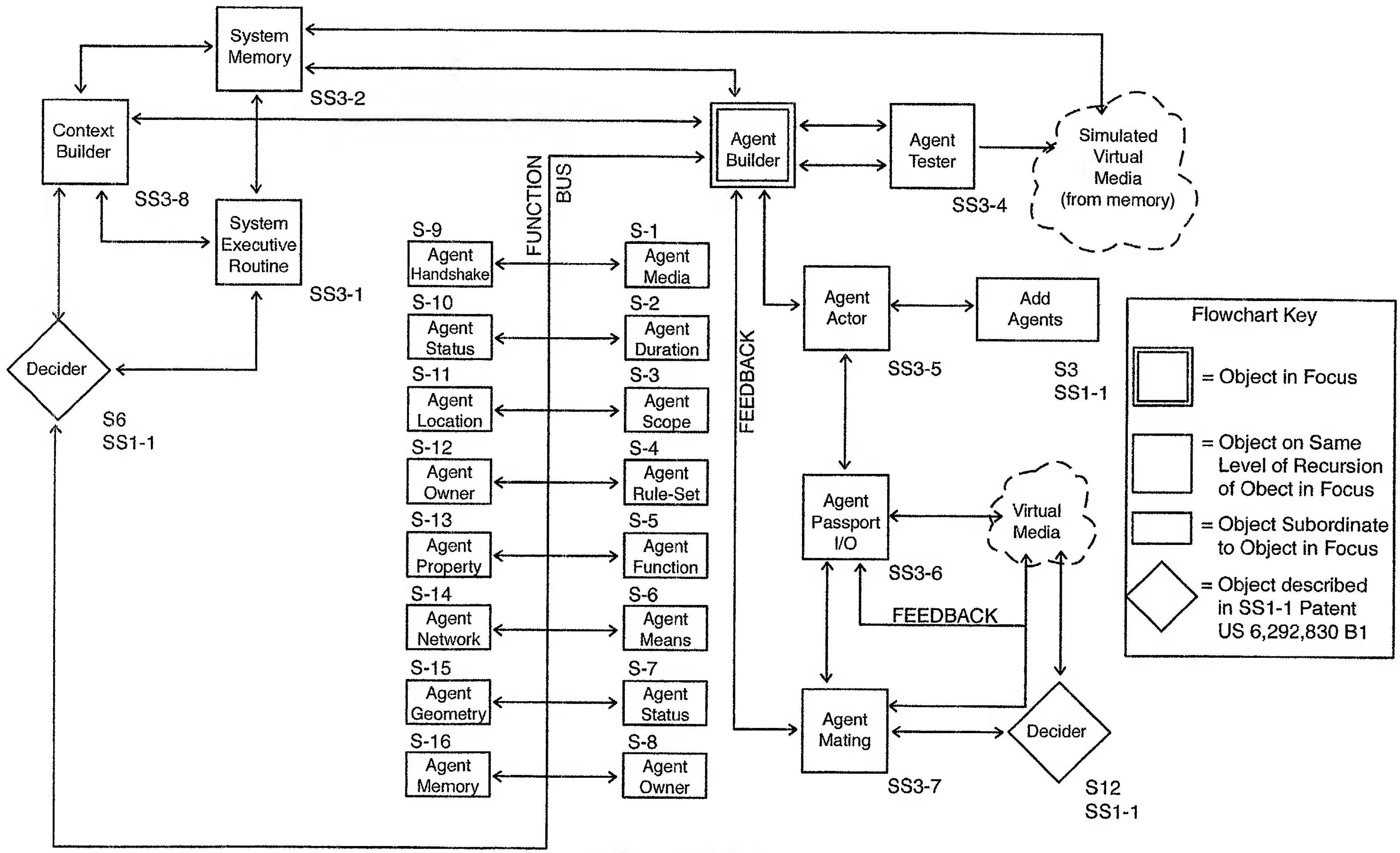
the learning path: five points of mastery

Table M17



22
6
25
1
2
9
11
13
14
15
21
20
26
S3
SS1-1
18
3
16
19
7
17
5
8
10
12
4
27
23
24

Fig. SS1-8



System Memory
SS3-2
Context Builder
SS3-8
System Executive Routine
SS3-1
Decider
S6
SS1-1
FUNCTION
BUS
S-9
Agent Handshake
S-10
Agent Status
S-11
Agent Location
S-12
Agent Owner
S-13
Agent Property
S-14
Agent Network
S-15
Agent Geometry
S-16
Agent Memory
S-1
Agent Media
S-2
Agent Duration
S-3
Agent Scope
S-4
Agent Rule-Set
S-5
Agent Function
S-6
Agent Means
S-7
Agent Status
S-8
Agent Owner
Agent Builder
FEEDBACK
Agent Tester
SS3-4
Simulated Virtual Media (from memory)
Agent Actor
SS3-5
Add Agents
S3
SS1-1
Agent Passport I/O
SS3-6
Virtual Media
FEEDBACK
Agent Mating
SS3-7
Decider
S12
SS1-1
Flowchart Key
= Object in Focus
= Object on Same Level of Recursion of Obect in Focus
= Object Subordinate to Object in Focus
= Object described in SS1-1 Patent US 6,292,830 B1

Fig. SS3-3

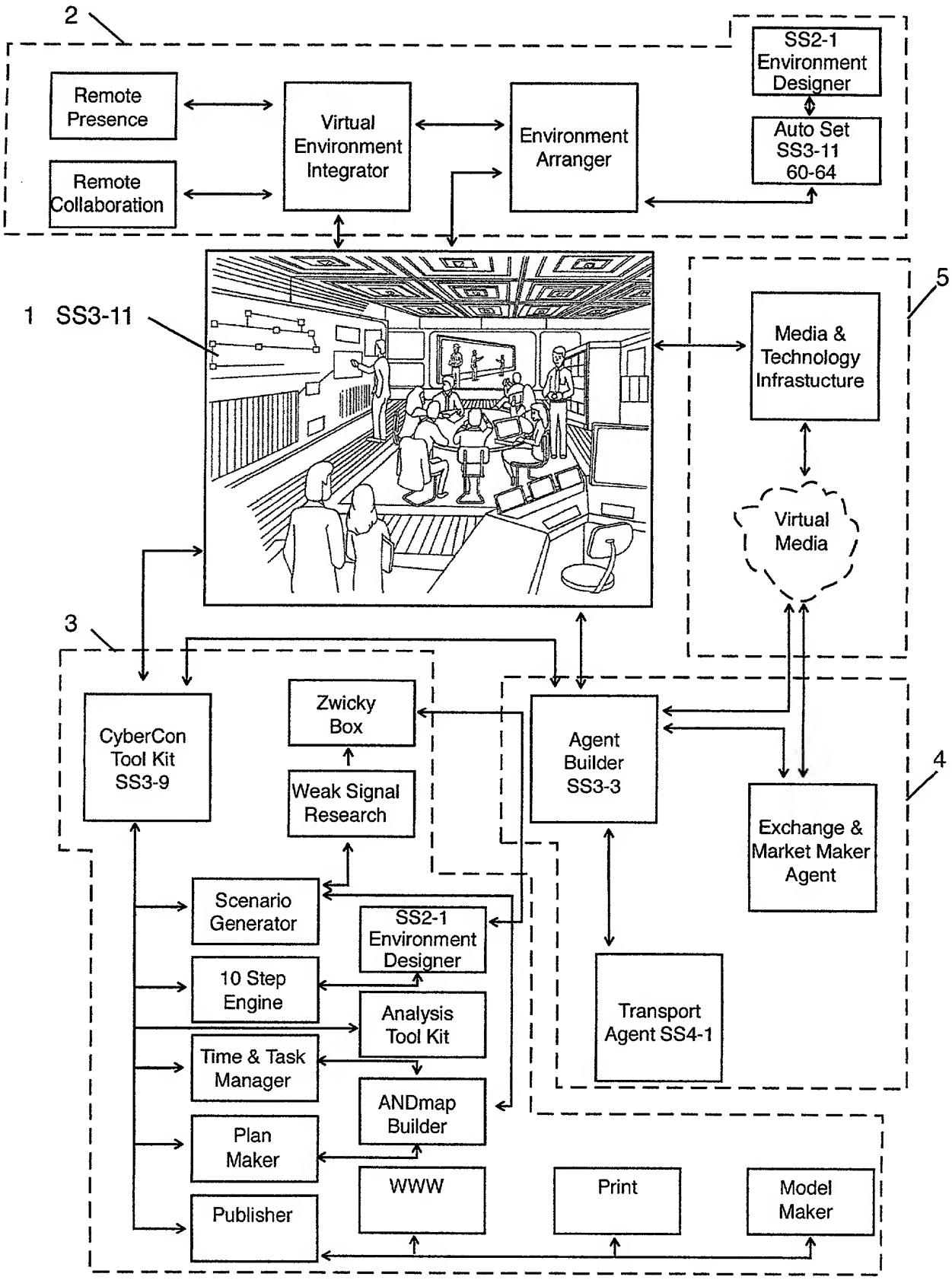

2
Remote Presence
Remote Collaboration
Virtual Environment Integrator
Environment Arranger
SS2-1 Environment Designer
Auto Set SS3-11 60-64
1 SS3-11
5
Media & Technology Infrastucture
Virtual Media
3
CyberCon Tool Kit SS3-9
Zwicky Box
Weak Signal Research
Agent Builder SS3-3
4
Exchange & Market Maker Agent
Scenario Generator
SS2-1 Environment Designer
10 Step Engine
Analysis Tool Kit
Time & Task Manager
ANDmap Builder
Plan Maker
Publisher
WWW
Print
Model Maker
Transport Agent SS4-1

Fig. SS3-12

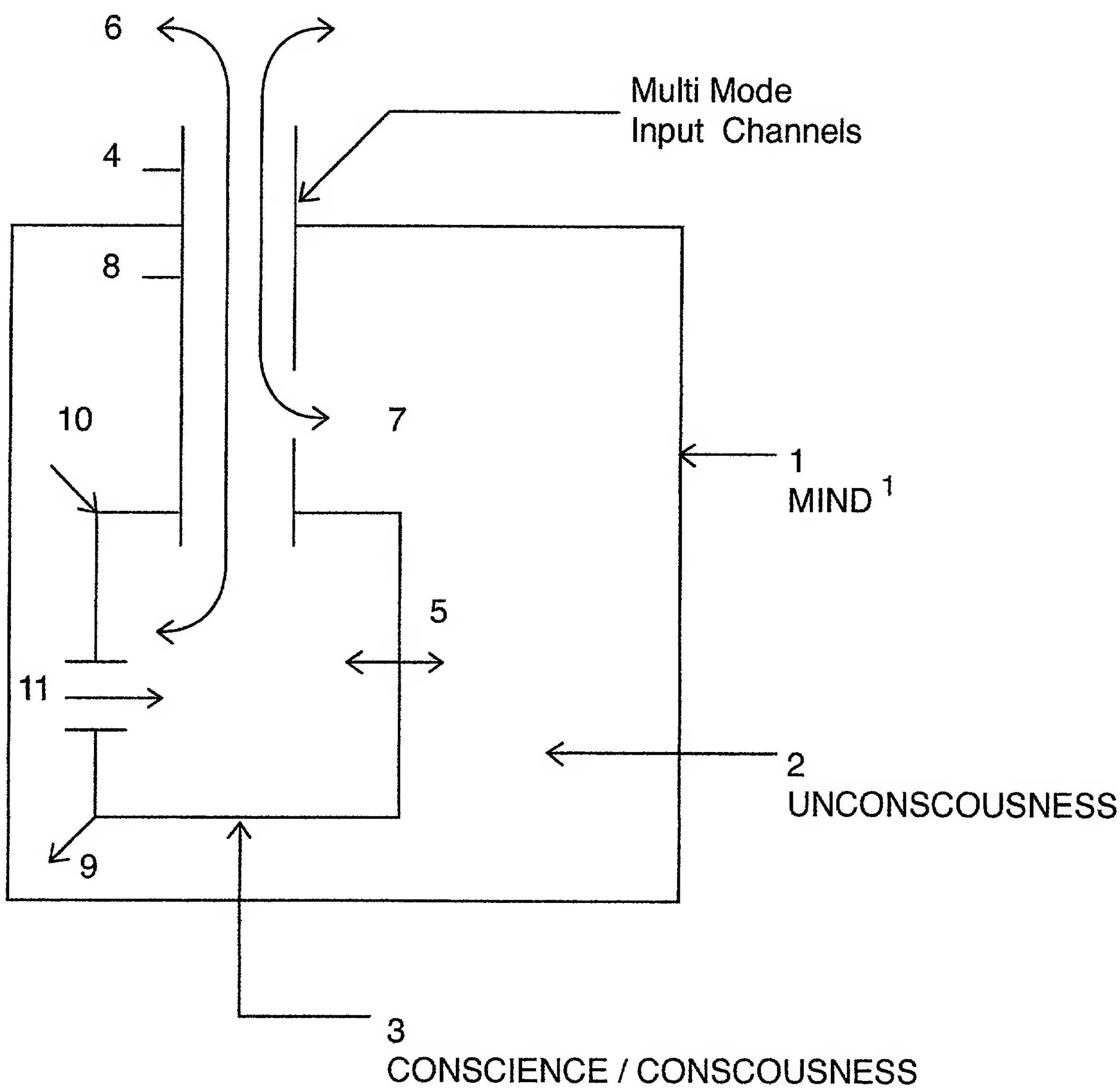

6
Multi Mode
Input Channels
4
8
10
7
1
MIND 1
5
11
2
UNCONSCOUSNESS
9
3
CONSCIENCE / CONSCOUSNESS

Fig. SS6-1

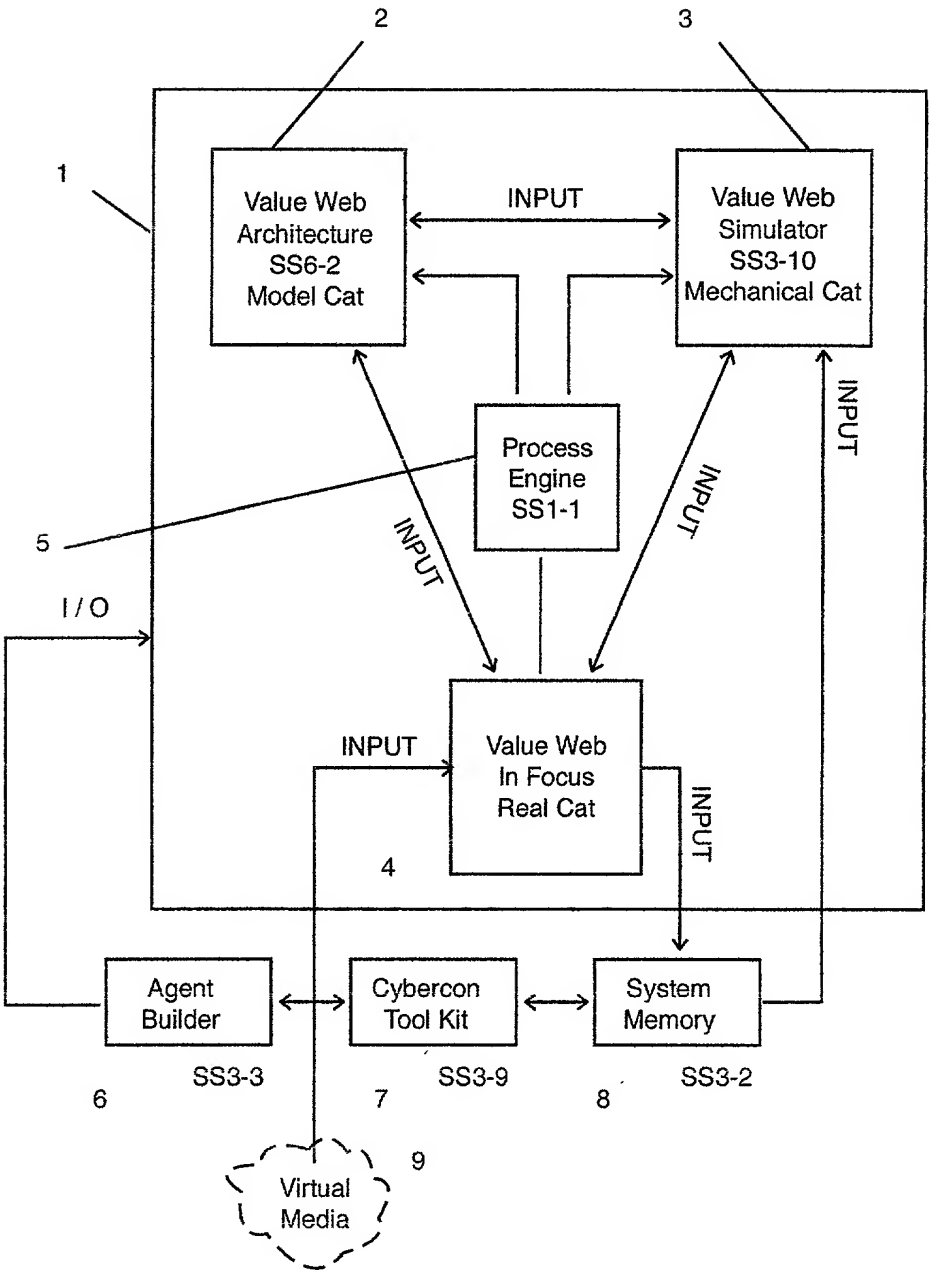


Fig. SS6-3